

AMENDMENT TO THE CLAIMS

Amend Claims 1-3, 8, 9, 12-24 as follows and add Claims 25-28.

1. (Currently Amended) A method for providing cooling water to a facility having equipment, the proper functioning of which requires cooling, said method comprising the steps of:

extending at least one pipe under a bottom floor of a water reservoir; and delivering ground water from under the bottom floor of the water reservoir through said at least one pipe to the said facility for cooling of said equipment.

2. (Currently Amended) The method of claim 1, further comprising the step of filtering the ground water through a sand substrate of the bottom floor of the water reservoir before delivering thereof to the facility, the water reservoir being a water body selected from the group consisting of an oceans ocean, seas sea, rivers river and lakes lake.

3. (Currently Amended) The method of claim 1, further comprising the steps of forming at least one elongated tunnel under the bottom floor of the water reservoir; and

extending a first pipe within the at least one elongated tunnel, so that the first pipe terminates at a distance from a shore of the water reservoir.

4. (Original) The method of claim 3, wherein the step of forming the tunnel includes one of trenching, horizontal directional drilling or tunnel shielding, the method further comprising the step of placing at least one second pipe into the at least one elongated tunnel.

5. (Original) The method of claim 4, wherein the first and at least one second pipe extend substantially horizontally.

6. (Currently Amended) The method of claim 4, wherein the distal ends of the first and at least one second pipe extend transversely to the bottom floor.

7. (Original) The method of claim 4, further comprising the step of providing the distal end of the first and at least one second pipe with a screening assembly configured to filter solid particles from the ground water to avoid pipeline sediment incursion.

8. (Currently Amended) The method of claim 1, wherein the delivery of ground water from under the bottom floor of the water reservoir includes providing a pump station on a shore or bank of the water reservoir or on the bottom floor thereof.

9. (Currently Amended) The method of claim 1, further comprising the step of discharging the delivered cooling water from the facility back into the water reservoir at temperatures minimizing thermal plumes, the facility being an industrial facility selected from the group consisting of a power plants plant, nuclear plants plant, and desalination plants plant.

10. (Original) The method of claim 4, wherein the first and at least one second pipe are dimensioned uniformly.

11. (Original) The method of claim 4, wherein the first and at least one second pipe are dimensioned non-uniformly, the method further comprising arranging the non-uniformly dimensioned first and second pipes in a succession of pipe groups, wherein each successive pipe group has pipes of a uniform length, which is greater than a uniform length of pipes constituting a previous one of the succession of pipe groups.

12. (Currently Amended) The method of claim 1, wherein the first pipe has a proximal end and a distal end, which extends under the bottom floor of the water reservoir, the method further comprising the step of extending the proximal end of the first pipe under the bottom floor or above the bottom floor.

13. (Currently Amended) A cooling water intake system comprising a delivery assembly configured to deliver cooling ground ~~waters~~ water from under a bottom floor of a water reservoir to ~~a facility equipment, the proper functioning of which requires cooling.~~

14. (Currently Amended) The cooling water intake system of claim 1413, wherein the bottom floor of said water reservoir includes a sand substrate, the delivery assembly comprising at least one tunnel formed under the bottom floor and extending to a predetermined terminal point offshore, at least one elongated pipe shaped and dimensioned to be received within the at least one tunnel and having a distal end, which extends towards the predetermined terminal point and located under the bottom floor of the water reservoir at a distance ranging from near shore to about one mile, the at least one pipe being configured to guide cooling ground water filtered through the sand substrate towards the facility, ~~the said~~ water reservoir being a water body selected from the group consisting of an oceans ocean, seas sea, rivers river and lakes lake.

15. (Currently Amended) The cooling water intake system of claim 1514, wherein the delivery assembly further comprises a second pipe received in the at least one tunnel and being substantially uniformly sized with the at least one elongated pipe, and a pump assembly in flow communication with proximal ends of the at least one and second pipes and configured to create a negative pressure

along the proximal ends of the at least one and second pipes sufficient to draw ground waters from under the bottom floor of the water reservoir through the sand substrate and into the distal ends of the at least one and second pipes, ~~whereas~~ wherein the drawn ground waters are free from planktonic organisms and have a substantially uniform annual temperature.

16. (Currently Amended) The cooling water intake system of claim ~~1615~~, wherein the distal ends of the at least one and second pipes extend substantially parallel to or transversely to the bottom floor and have a filtering assembly configured to separate solid particles from the ground waters.

17. (Currently Amended) The cooling water intake system of claim ~~1615~~, wherein the distal ends of the at least one and second pipes are perforated or provided with elongated slots covered by a screening assembly, the screening assembly being woven wire screencloths or wire mesh.

18. (Currently Amended) The cooling water intake system of claim ~~1817~~, wherein the elongated slots provided along the distal ends of the at least one and second pipes are linear or helical.

19. (Currently Amended) The cooling water intake system of claim ~~17~~16, wherein the filtering assembly includes a ~~membrane~~ screen covering ~~the~~ at least one and second pipes.

20. (Currently Amended) The cooling water intake system of claim ~~16~~15, wherein the pump assembly is located on a shore or bank of the water reservoir or is immersed into the water reservoir and is selected from the group consisting of a turbine ~~pumps~~ pump, a suction lift self-priming centrifugal ~~pumps~~ pump, a high head submergible ~~pumps~~ pump and a combination thereof.

21. (Currently Amended) The cooling water intake system of claim ~~14~~13, further comprising a discharge system configured to guide discharged cooling water back to the water reservoir at a temperature substantially preventing thermal plume plumes.

22. (Currently Amended) The cooling water intake system of claim ~~18~~17, wherein the perforations are non-uniformly dimensioned.

23. (Currently Amended) The cooling water intake system of claim ~~16~~15, wherein the at least one and second elongated pipes are non-uniformly dimensioned.

24. (Currently Amended) The cooling water intake system of claim ~~18~~<sup>17</sup>, wherein the screening assembly has a screen size of about 0.02 inches (0.5mm).

25. (New) The cooling water intake system of claim 13 wherein said equipment is located in an onshore facility.

26. (New) The cooling water intake system of claim 25, wherein said onshore facility is selected from the group consisting of a power plant, a nuclear plant and a desalination plant.

27. (New) The cooling water intake system of claim 25 wherein said cooling ground water is returned to said water reservoir after cooling said equipment without causing detrimental thermal plumes.

28. (New) A method for providing cooling water to a facility having equipment, the proper functioning of which requires cooling, said method comprising the steps of extending at least one pipe under the floor of a water reservoir;

delivering ground water from under the floor of said reservoir through said at least one pipe to said facility for cooling said equipment; and after cooling said equipment discharging said ground water back to said water reservoir without causing detrimental thermal plumes.